**Object-Oriented Programming**

**Skill Description**

Aspiring Andelans should understand what classes and objects are, how to design simple data models, and how to apply object-oriented programming principles to solve basic problems.

**Output**

After attaining this skill, and as a demonstration of it, I should be able to create the following:

1. GitHub repo containing a real-world problem modeled using OOP while taking advantage of inheritance, encapsulation, polymorphism and the other OOP concepts.

**Objectives**

**Knowledge**

**Object-oriented Programming** (**OOP**) is the process of converting this perfectly defined design into a working program that does exactly what an organization have requested.

| **Knowledge Unit** | **Studied** | **Applied** |
| --- | --- | --- |
| -I can describe the following from memory: |  |  |
| -To Definition of a class and an object | [ ] | [ ] |
| -Definition of common OOP principles and concepts | [ ] | [ ] |
| -Examples of languages that support OOP and languages that are purely procedural | [ ] | [ ] |
| -Examples of where OOP can be successfully applied | [ ] | [ ] |
| -Key differences between object-oriented programming and procedural programming and benefits of OOP over the latter | [ ] | [ ] |
|  | [ ] | [ ] |

**Behaviors**

|  | **Practiced** | | | **Observed** |
| --- | --- | --- | --- | --- |
| 1. **Details:**I was challenged with with a data modeling problems **and I use** the IDLE to run my program to identify all the errors and corrected it. | [ ] | | | [ ] |
| 1. During creating a class models for an object Action**,** I define my attributes as variables and behaviour as methods within my class | [ ] | | | [ ] |
| 1. Practicing on code I foresee will grow dramatically **Action:** I did consultation to ensure my code is correct. 2. Use of slack to conduct the group and the facilitator for assistance which was a step ahead | [ ] | | | [ ] |
| **Self confidence** | | **Felt** | **Demonstrated** | |
| 1. Code modeling g is an object oriented way that made me to think more and apply on the knowledge e gained through the available tutorials gained from the facilitation. | | [ ] | [ ] | |

1. Coding can be written in different ways to solve the same problem